

CLAIMS

1. A food, a beverage or a pharmaceutical composition containing astaxanthin and/or an ester thereof as an active ingredient, and having a circadian rhythm normalizing action.
2. A food, a beverage or a pharmaceutical composition containing astaxanthin and/or an ester thereof as an active ingredient, and aimed at preventing and alleviating sleep disorder and various diseases due to disturbance of a circadian rhythm.
3. A food, a beverage or a pharmaceutical composition containing astaxanthin and/or an ester thereof, and adapted to enhance a hypnotic action and/or a circadian rhythm normalizing action of melatonin owing to protection of endogenous melatonin by the astaxanthin and/or ester thereof, and to produce actions of preventing and alleviating sleep disorder and various diseases due to disturbance of a circadian rhythm.
4. A composition comprising astaxanthin and/or an ester thereof and melatonin, adapted to enhance a hypnotic action and/or a circadian rhythm normalizing action of melatonin as a result of ingestion of the astaxanthin and/or ester thereof and melatonin in combination, and aimed at preventing and alleviating sleep disorder and various diseases due to disturbance of a circadian rhythm.
5. A composition containing astaxanthin and/or an ester thereof, for suppression of degradation of in vivo melatonin by the astaxanthin and/or ester thereof.